



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R07-OAR-2014-0900; FRL-9921-23-Region 7]**

**Approval and Promulgation of Implementation Plans; Attainment  
Redesignation for Missouri Portion of the St. Louis MO-IL Area;  
1997 8-Hour Ozone Standard and Associated Maintenance Plan**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve the State of Missouri's request to redesignate the Missouri portion of the St. Louis MO-IL nonattainment area, the "St. Louis area" or "area" to attainment for the 1997 8-hour National Ambient Air Quality Standards (NAAQS or Standard) for ozone (O<sub>3</sub>). The Missouri counties comprising the St. Louis area are Franklin, Jefferson, St. Charles, and St. Louis along with the City of St. Louis. In addition to the redesignation request, EPA is proposing to approve a State Implementation Plan (SIP) revision containing a maintenance plan for the O<sub>3</sub> standard for the Missouri portion of the St. Louis area. In a separate action published in the **Federal Register** on June 12, 2012, EPA has taken final action to address the Illinois portion of the St. Louis area.

**DATES:** Comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R07-OAR-2014-0900, by one of the following methods:

1. [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions for submitting comments.
2. *Email:* kemp.lachala@epa.gov.
3. *Mail or Hand Delivery or Courier:* Ms. Lachala Kemp, Environmental Protection Agency, Air Planning and Development Branch, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

*Instructions:* Direct your comments to Docket ID No. EPA-R07-OAR-2014-0900. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through <http://www.regulations.gov> or email information that you consider to be CBI or otherwise protected. The <http://www.regulations.gov> website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through <http://www.regulations.gov>, your email address will be automatically captured and included as part of

the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and should be free of any defects or viruses.

*Docket:* All documents in the electronic docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically at <http://www.regulations.gov> or in hard copy at the Environmental Protection Agency, Air Planning and Development Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219. EPA requests that you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The interested persons wanting to examine these documents should make an appointment with the office at least 24 hours in advance.

**FOR FURTHER INFORMATION CONTACT:** Ms. Lachala Kemp,  
Environmental Protection Agency, Air Planning and Development  
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**SUPPLEMENTARY INFORMATION:** Throughout this document whenever  
"we," "us," or "our" is used, we refer to EPA. This section  
provides additional information by addressing the following:

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**I. What Action is EPA Proposing to Take?**

EPA is proposing to approve actions related to Missouri's request to redesignate the St. Louis area to attainment for the 1997 8-hour ozone standard. Missouri submitted the first request on November 3, 2011, and then supplemented and revised their request on April 29, 2014. In this notice, when EPA refers to Missouri's redesignation request, we are referring to both the 2011 and 2014 submissions together unless otherwise specified. Today's proposed actions are summarized as follows and described in greater detail throughout this notice of proposed rulemaking. EPA proposes to approve the redesignation request for the Missouri portion of the St. Louis area to attainment for the

1997 8-hour O<sub>3</sub> NAAQS, and also proposes to approve under section 175A of the Clean Air Act (CAA or Act), Missouri's 1997 8-hour O<sub>3</sub> NAAQS maintenance plan.

First, EPA proposes to determine that the Missouri portion of the St. Louis area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. In this action, EPA is proposing to approve a request to change the legal designation of Franklin, Jefferson, St. Charles, and St. Louis Counties along with the City of St. Louis from nonattainment to attainment for the 1997 8-hour O<sub>3</sub> NAAQS.

Second, EPA is proposing to approve Missouri's 1997 8-hour ozone (O<sub>3</sub>) NAAQS maintenance plan for the Missouri portion of the St. Louis area as meeting the requirements of CAA section 175A (such approval being one of the CAA criteria for redesignation to attainment status). The maintenance plan is designed to keep the St. Louis area in attainment of the 1997 8-hour O<sub>3</sub> NAAQS through 2025.

## **II. What is the Background for EPA's Proposed Actions?**

Ground-level ozone is generally not emitted directly by sources. Rather, directly-emitted oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC) react in the presence of sunlight to form ground-level ozone, as a secondary pollutant, along with other secondary compounds. NO<sub>x</sub> and VOC are referred to as precursors of ozone. Reduction of peak ground-level ozone

concentrations is typically achieved through controlling of VOC and NO<sub>x</sub> emissions.

On July 18, 1997, EPA promulgated a revised 8-hour ozone NAAQS of 0.08 parts per million (ppm) (62 FR 38856). Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate as nonattainment any area that is violating the NAAQS, based on the three most recent years of ambient air quality data at the conclusion of the designation process. On April 30, 2004, EPA published a final rule designating and classifying areas under the 8-hour ozone NAAQS. (69 FR 23857). These designations became effective on June 15, 2004. EPA designated as nonattainment any area that was violating the 8-hour ozone NAAQS based on the three most recent years of air quality data, 2001-2003.

The CAA contains two sets of provisions, subpart 1 and subpart 2, that address planning and control requirements for nonattainment areas. (Both are found in title I, part D, of the CAA; 42 U.S.C. 7501-7509a and 7511-7511f, respectively.) Subpart 1 contains general requirements for nonattainment areas for any pollutant, including ozone, governed by a NAAQS. Subpart 2 provides more specific requirements for ozone nonattainment areas.

Under EPA's implementation rule for the 1997 8-hour ozone standard, (69 FR 23951, April 30, 2004), an area was classified under subpart 2 based on its 8-hour ozone design value (i.e. the three-year average annual fourth-highest daily maximum 8-hour average ozone concentration), if it had a 1-hour design value at the time of designation at or above 0.121 ppm (the lowest 1-hour design value in Table 1 of subpart 2) (69 FR 23954). All other areas were covered under subpart 1, based upon their 8-hour design values (69 FR 23958). The St. Louis area was designated as a subpart 2, 8-hour ozone moderate nonattainment area by EPA on April 30, 2004 (69 FR 23857, 23898, and 23915), based on air quality monitoring data from 2001-2003 (69 FR 23860). 40 CFR 50.10 and 40 CFR part 50, appendix I provide that the 8-hour ozone standard is attained when the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm, when rounded. The data completeness requirement is met when the average percent of days with valid ambient monitoring data is greater than ninety percent, and no single year has less than seventy five percent data completeness. See 40 CFR part 50, appendix I, 2.3(d).

In this proposed redesignation, EPA takes into account a number of decisions and orders of the D.C Circuit and Supreme Court of the United States regarding the status of EPA's Cross

State Air Pollution Rule (CSAPR) that impact this proposed redesignation action. The effect of those court actions on this rulemaking are discussed in detail in Section IV of this notice.

### **III. What are the Criteria for Redesignation to Attainment?**

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided the following criteria are met: (1) the Administrator determines that the area has attained the applicable NAAQS, (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k), (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable Federal air pollutant control regulations and other permanent and enforceable reductions, (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A, and (5) the state containing such area has met all requirements applicable to the area under section 110 and part D of title I of the CAA.

### **IV. What is EPA's Analysis of the State's Request?**

As stated above, in accordance with the CAA, EPA proposes in today's action: (1) to redesignate the Missouri portion of



the St. Louis to attainment for the 1997 8-hour O<sub>3</sub> NAAQS; and (2) to approve the Missouri portion of the St. Louis area's 1997 8-hour O<sub>3</sub> maintenance plan. These actions are based upon EPA's determination that the Missouri portion of the St. Louis area continues to attain the 1997 8-hour O<sub>3</sub> NAAQS and that all other redesignation criteria have been met for the Missouri portion of the St. Louis area. The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the area in the following paragraphs of this section.

*Criteria (1)- The St. Louis Area Has Attained the 1997 8-hour O<sub>3</sub> NAAQS*

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). EPA is proposing to determine that the St. Louis area is attaining the 1997 8-hour O<sub>3</sub> NAAQS.

For O<sub>3</sub>, an area may be considered to be attaining the 1997 8-hour ozone if it meets the 1997 8-hour ozone NAAQS, as determined in accordance with 40 CFR 50.10 and appendix I of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain this NAAQS, the fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm. Based on the

rounding convention described in 40 CFR part 50, appendix I, the standard is attained if the design value<sup>1</sup> is 0.084 ppm or below. The relevant data must be collected and quality-assured in accordance with 40 CFR Part 58 and recorded in the EPA Air Quality System (AQS) database. The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

On June 9, 2011, EPA determined that the St. Louis area was attaining the 1997 8-hour O<sub>3</sub> NAAQS (76 FR 33647). In that action, EPA reviewed O<sub>3</sub> monitoring data from monitoring stations in the area for the 1997 8-hour O<sub>3</sub> NAAQS for 2008-2010. These data have been quality-assured and are recorded in AQS. On April 30, 2012, at 77 FR 25363, EPA also finalized a determination that the St. Louis area attained the 1997 8-hour O<sub>3</sub> NAAQS by the applicable attainment date of June 15, 2010. In addition, EPA has reviewed more recent data, which indicates that the St. Louis area is currently attaining the 1997 8-hour O<sub>3</sub> NAAQS. The most recent year available with complete, quality-assured and certified ambient air monitoring is 2013, during which the area recorded a three year average O<sub>3</sub> concentration of 0.082 ppm. As summarized in Table 1 below, the 3-year average of annual arithmetic mean

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<sup>1</sup> The design value is the highest three-year average of the fourth-highest daily maximum 8-hour average for all monitors within the area.

concentrations (i.e., design values) for the years 2010, 2011, and 2013 for the St. Louis area are below the 1997 8-hour O<sub>3</sub> NAAQS.

**Table 1. Design Value Concentrations for the Missouri Portion of the St. Louis Area for the 1997 8-hour O<sub>3</sub> NAAQS**

State	County	Monitor	AQS Site ID	Annual O <sub>3</sub> 3-Year Design Values (ppm)			
				2008-2010	2009-2011	2010-2012	2011-2013
Missouri	Jefferson	Arnold	29-099-0019	0.072	0.074	0.079	0.076
Missouri	St. Charles	Orchard Farm	29-183-1004	0.074	0.075	0.080	0.078
		West Alton	29-183-1002	0.077	0.079	0.086	0.082
Missouri	St. Louis	Maryland Heights	29-189-0014	0.071	0.075	0.082	0.080
		Pacific	29-189-0005	0.065	0.067	0.07	0.074
Missouri	St. Louis City	Blair Street	29-510-0085	0.069	0.071	0.079	0.077

As discussed above, the design value for an area is the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentration recorded at any monitor in the area for a 3-year period. Therefore, the 3-year design value for the period on which Missouri based its redesignation request (2008-2010) for the St. Louis area is 0.077 ppm, which meets the NAAQS as described above. Additional details can be found in EPA's final clean data determination for the St. Louis area (76 FR 33647, June 9, 2011). EPA has reviewed the most recent data available, which indicate that the St. Louis area is currently attaining

the 1997 O<sub>3</sub> NAAQS beyond the submitted 3-year attainment period of 2008-2010<sup>2</sup>. The certified 3-year design value for 2011-2013 is 0.082 ppm<sup>3</sup>. As discussed in more detail below, MDNR has committed to continue monitoring in this area in accordance with 40 CFR Part 58.

EPA proposes to determine that the data submitted by Missouri, as well as the data taken from AQS, and additional EPA analysis indicate that the St. Louis area is attaining the 1997 8-hour O<sub>3</sub> NAAQS.

*Criteria (2) - The Missouri Portion of the St. Louis Area Has a Fully Approved SIP Under Section 110(k) and Criteria (5) - the Area Has Met All Applicable Requirements Under Section 110 and Part D*

EPA has determined that Missouri has met all currently applicable SIP requirements for purposes of redesignation for the Missouri portion of the St. Louis area under section 110 of the CAA (general SIP requirements). Additionally, EPA has also determined that the Missouri SIP meets all SIP requirements currently applicable for purposes of redesignation under part D

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<sup>2</sup> The 3 year design value for the 2010-2012 period for the St. Louis area recorded a violation at 0.086 ppm, but the area has since come into attainment.

<sup>3</sup> Under EPA's rounding convention described above, the standard is attained if the design value is 0.084 ppm or below.

of title I of the CAA (requirements specific to moderate nonattainment areas), in accordance with CAA section 107(d)(3)(E)(v). In addition, EPA has determined that the Missouri SIP has been fully approved with respect to all requirements applicable for purposes of redesignation in accordance with CAA section 107(d)(3)(E)(ii).

In proposing these determinations, EPA ascertained which requirements are applicable to the Missouri portion of the St. Louis area and, if applicable, that they are fully approved under section 110(k) of the CAA. See sections IV. a and b below.

a. The Missouri Portion of the St. Louis Area Has Met All Applicable Requirements for Purposes of Redesignation Under section 110 and part D of the CAA.

*General SIP Requirements.* Section 110(a)(2) of title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means, or techniques; provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality; and programs to enforce the limitations. General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: (1) submittal of a SIP that has been adopted by the state after reasonable public

notice and hearing; (2) provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; (3) implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)); (4) provisions for the implementation of part D requirements (Nonattainment New Source Review (NNSR) permit programs); (5) provisions for air pollution modeling; and (6) provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. The section 110(a)(2)(D) requirements are not linked with a particular nonattainment area's designation and classification in that state. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that the CAA's interstate transport requirements should be construed to be applicable requirements for purposes of redesignation.

In addition, EPA believes other section 110 elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable

requirements for purposes of redesignation. The Missouri portion of the area will still be subject to these requirements after the area is redesignated. The section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability of conformity (i.e., for redesignations) and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996), (62 FR 24826, May 7, 1997); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). See also the discussion on this issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001).

*Part D Requirements.* EPA has determined that Missouri has met all currently applicable SIP requirements for purposes of redesignation for the Missouri portion of the St. Louis area under part D of the CAA. Subpart 1 of part D, found in sections 171-179 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas. Subpart 2 of part D, which includes section 182 of the CAA, establishes

additional specific requirements depending on the area's nonattainment classification.

The St. Louis area was classified as a moderate nonattainment area under subpart 2, therefore the state must meet the applicable requirements of both subpart 1 and subpart 2 of part D. The applicable subpart 1 requirements are contained in sections 172(c)(1)-(9) and in section 176. The applicable subpart 2 requirements are contained in sections 182(a) and (b) (marginal and moderate nonattainment area requirements).

For purposes of evaluating this redesignation request, the applicable part D, subpart 1 SIP requirements for all nonattainment areas are contained in sections 172(c)(1)-(9) and in section 176. A thorough discussion of the requirements contained in section 172 can be found in the General Preamble for Implementation of title I (57 FR 13498, April 16, 1992).

*Subpart 1 Section 172 Requirements* Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all reasonably available control measures(RACM) as expeditiously as practicable and to provide for the attainment of the national ambient air quality standards. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in each area as



components of the area's attainment demonstration. Under Section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. Section 182 of the CAA, found in subpart 2 of part D, establishes additional specific requirements depending on the areas ozone nonattainment classification. For purposes of evaluating this redesignation request, the applicable part D, subpart 2 SIP requirements for all moderate nonattainment areas are contained in section 182 (b) (1) through (5).

EPA's longstanding interpretation of the nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of CAA section 107(d) (3) (E) (ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. See 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for reasonable further progress and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was

also set forth in the Calcagni Memorandum (September 4, 1992)<sup>4</sup>. EPA's understanding of section 172 also forms the basis of its Clean Data Policy, which was articulated with regard to ozone in 40 CFR 51.918, and suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for reasonable further progress (RFP), RACM, and contingency measures under section 172(c)(9). Courts have upheld EPA's interpretation of section 172(c)(1)'s "reasonably available" control measures and control technology as meaning only those controls that advance attainment, which precludes the need to require additional measures where an area is already attaining. *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155, 162 (D.C. Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735, 744 (5th Cir. 2002).

Therefore, because attainment has been determined in the St. Louis Area, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements for an attainment demonstration and RACM are no longer considered to be applicable for purposes of redesignation as long as the Area continues to attain the standard until redesignation. The section 172(c)(2)

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<sup>4</sup> John Calcagni, Director Air Quality Management Division (MD-15), Office of Air Quality Planning and Standards. "Procedures for Processing Requests to Redesignate Areas to Attainment" Memorandum to EPA Director, Air, Pesticides, and Toxics Management Division, Regions I and IV, Director, Air and Waste Management Division, Region II, Director, Air, Radiation and Toxics Division, Region III, Director, Air and Radiation Division, Region V, Director, Air, Pesticides, and Toxics Division, Director, Air, and Toxics Division, Regions VII, VIII, IX, and X, September 4, 1992, (Calcagni Memorandum).

requirement that nonattainment plans contain provisions promoting reasonable further progress toward attainment is also not relevant for purposes of redesignation because EPA has determined that the St. Louis Area has monitored attainment of the 1997 8-hour ozone NAAQS. In addition, because the Area has attained the NAAQS and is no longer subject to an RFP requirement, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes of redesignation. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Sections 172(c)(3) and 182(b)(1) require submission and approval of a comprehensive, accurate, and current inventory of actual emissions. Section 182(b) references section 182(a) of the CAA which requires, in part, that states submit a current inventory of actual emissions (CAA Section 182(a)(1)). Missouri submitted a 2002 base-year emissions inventory on June 16, 2006, and EPA approved the submission on May 31, 2007, as meeting the section 172(c)(3) and section 182(b)(1) emissions inventory requirement. See 72 FR 30272.

Section 172(c)(4) of the CAA requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and CAA section

172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, since the PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a nonattainment NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." Nevertheless, Missouri currently has an approved NNSR program and Missouri's approved PSD program for the 1997 8-hour O<sub>3</sub> NAAQS will become effective in the Missouri portion of the St. Louis area upon redesignation to attainment.

Section 172(c)(7) of the CAA requires the SIP to meet the applicable provisions of CAA section 110(a)(2). As noted previously, we believe the Missouri SIP meets the requirements of CAA section 110(a)(2) that are applicable for purposes of redesignation.

*Subpart 1 Section 176 Conformity Requirements.* Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that Federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects developed, funded or approved under Title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other Federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement and enforceability which EPA promulgated pursuant to its authority under the CAA. EPA approved the most recent revisions to the transportation conformity SIP for the Missouri portion of the St. Louis area on August 29, 2013 (78 FR 53247).

Thus, for purposes of redesignating the Missouri portion of the St. Louis area to attainment, EPA is proposing that Missouri has satisfied all applicable requirements for purposes of redesignation for the St. Louis area under CAA section 110 and part D of title I of the CAA.

*Subpart 2 Section 182(a) and (b) Requirements*  
*Comprehensive Emissions Inventory.* Section 182(a)(1) requires the submission of a comprehensive emission inventory. As

mentioned above, EPA approved Missouri's 2002 inventory as meeting the section 182(a)(1) comprehensive emissions inventory requirement. See 72 FR 30272. Missouri also submitted a 2008 emissions inventory as the base year as part of the maintenance plan.

*Emissions Statement.* Section 182(a)(3)(B) requires states with areas designated nonattainment for the ozone NAAQS to submit a SIP revision to require emissions statements to be submitted to the state by sources within that nonattainment area. EPA approved Missouri's emission statement SIP on May 31, 2007 (72 FR 30272).

*VOC RACT.* Section 182(b)(2) requires states with moderate nonattainment areas to implement RACT under section 172(c)(1) with respect to each of the following: (1) All sources covered by a Control Technology Guideline (CTG) documented issued between November 15, 1990, and the date of attainment; (2) all sources covered by a CTG issued prior to November 15, 1990; and, (3) all other major non-CTG stationary sources. With respect to the first category, EPA issued CTGs for five source categories in September 2006, three source categories in September 2007, and five additional source categories in Sept 2008. Areas classified as moderate and above were required to submit VOC RACT for the source categories covered by these CTGs, by

September 2007, September 2008, and September 2009, respectively. Missouri submitted a SIP revision on January 17, 2007, with a supplemental revision on June 1, 2007, and May 8, 2012. EPA approved the VOC RACT rules on January 23, 2012, (77 FR 3144) and January 6, 2014 (79 FR 580).

*NO<sub>x</sub> RACT.* Section 182(f) establishes NO<sub>x</sub> requirements for ozone nonattainment areas. However, it provides that these requirements do not apply to an area if the Administrator determines that NO<sub>x</sub> reductions would not contribute to attainment of the NAAQS. On July 21, 2011, EPA approved a request from Missouri to exempt sources of NO<sub>x</sub> in the Missouri portion of the St. Louis area from section 182(f) NO<sub>x</sub> RACT requirements. See 76 FR 43598. Therefore, the state of Missouri need not have fully approved NO<sub>x</sub> control measures under section 182(f) for the Missouri portion of the St. Louis area to be redesignated to attainment.

*Stage II Vapor Recovery.* Originally, the section 182(b)(3) Stage II requirements applied to all moderate ozone nonattainment areas. However, under section 202(a)(6) of the CAA, 42 U.S.C. 7521(a)(6), the requirements of section 182(b)(3) no longer apply in moderate ozone nonattainment areas after EPA promulgated the onboard refueling vapor recovery standards on April 6, 1994 (59 FR 16262), codified at 40 CFR parts 86 (including 86.098-8), 88 and 600. Under implementation rules

issued in 2002 for the 1997 8-hour ozone NAAQS, EPA retained the Stage II-related requirements under section 182(b)(3) as they applied for the now-revoked 1-hour ozone NAAQS. See 40 CFR 51.900(f)(5) and 40 CFR 51.916(a). Therefore, as a moderate ozone nonattainment area for the 1997 standard, the Missouri portion of the St. Louis area is not subject to the Stage 2 vapor recovery program requirements.

*Vehicle Inspection and Maintenance (I/M)*. Section 182(b)(4) of the CAA requires states with areas designated nonattainment for the ozone NAAQS to submit SIPs requiring inspection and maintenance of vehicles (I/M). EPA approved Missouri's 10 CSR 10-5.380 "Motor Vehicle Emissions Inspection" rule into the Missouri SIP on May 18, 2000 (65 FR 31480), and approved an additional revision on May 12, 2003 (68 FR 25414). Missouri replaced this rule with 10 CSR 10-5.381, "On-board Diagnostics Motor Vehicle Emissions Inspection", and has been implementing the program since 2007. EPA has included in the docket for this action the TSD for the proposed approval of 10 CSR 10-5.381, which is being addressed in a separate action. The TSD explains in detail the projected emissions based on the state-approved I/M program. As demonstrated in the TSD, emissions have continued to trend downward since the implementation of this program by the State. The TSD further explains EPA's basis for proposing approval of 10 CSR 10-5.381 into the SIP. If EPA



receives comments on that proposal and they impact this redesignation request, EPA will address those comments in relation to this action as well<sup>5</sup>.

Thus, for purposes of redesignating the Missouri portion of the St. Louis area to attainment, EPA determines that Missouri has satisfied all applicable requirements for CAA section 110 and part D of title I of the CAA.

b. The Missouri Portion of the St. Louis Area has a Fully Approved Applicable SIP Under Section 110(k) of the CAA.

EPA has fully approved the state's SIP for the Missouri portion of the St. Louis area for the 1997 8-hour ozone nonattainment area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (see Calcagni Memorandum at p. 3; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-90 (6<sup>th</sup> Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6<sup>th</sup> Cir. 2001, upholding this interpretation)) plus any additional measures it may approve in conjunction with a redesignation action (see 68 FR 25426 (May 12, 2003) and citations therein). Following passage of the CAA of 1970, Missouri has adopted and submitted, and EPA has fully

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<sup>5</sup> EPA-R07-OAR-2014-0399

approved at various times, provisions addressing the various SIP elements applicable for the 1997 8-hour ozone NAAQS in the St. Louis area (e.g., (72 FR 25975, May 8, 2007) and (76 FR 40619, July 11, 2011)).

*Criteria (3)- The Air Quality Improvement Is Due to Permanent and Enforceable Reductions in Emissions Resulting From Implementation of the SIP and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions (Section 107(d)(3)(E)(iii)).*

For redesignating a nonattainment area to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions. EPA proposes to find that Missouri has demonstrated that the observed air quality improvement in the St. Louis area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, Federal measures, and other state adopted measures discussed below.

In making this demonstration, MDNR has calculated the change in emissions from a nonattainment year inventory to an attainment year inventory. For the nonattainment inventory, Missouri developed a 2002 base year emissions inventory. For the

attainment inventory, Missouri developed an inventory for 2008, one of the years the St. Louis area monitored attainment of the standard. See section b. below for discussion on development of these inventories. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to a number of permanent and enforceable regulatory control measures that St. Louis and upwind areas have implemented in recent years.

a. Permanent and Enforceable Controls Implemented

The following is a discussion on the permanent and enforceable measures that have been implemented in the area. Reductions in VOC and NO<sub>x</sub> emissions have occurred statewide and in upwind areas as a result of Federal emission control measures, with additional emission reductions expected to occur in the future. Federal emission control measures include the following:

*Tier 2 vehicle standards and low-sulfur gasoline.* These emission control requirements result in lower VOC and NO<sub>x</sub> emissions from new cars and light duty trucks, including sport utility vehicles. The Federal rules were phased in between 2004 and 2009. EPA has estimated that, after phasing in the new requirements, new vehicles emit less NO<sub>x</sub> in the following percentages: Passenger cars (light duty vehicles)—seventy seven percent; light duty trucks, minivans, and sports utility

vehicles—eighty six percent; and larger sports utility vehicles, vans, and heavier trucks—sixty-nine to ninety-five percent. VOC emission reductions are expected to range from 12 to 18 percent. EPA expects fleet wide average emissions to decline by similar percentages as new vehicles replace older vehicles. Some of these emission reductions occurred by the attainment years (2008-2010) and additional emission reductions will occur throughout the maintenance period.

*Heavy-duty Diesel Engine Rule.* On October 6, 2000, EPA promulgated a rule to reduce NO<sub>x</sub> and VOC emissions from heavy-duty gasoline and diesel highway vehicles that began to take effect in 2004 (65 FR 59896). The program should achieve a ninety-five percent reduction in NO<sub>x</sub> emission for new engines compared to existing engines.

*Tier 4 Non-Road Diesel Engine Rule.* Promulgated in 2004, this rule is being phased in between 2008 and 2014. This rule will require stricter emission standards for nonroad diesel engines. When fully implemented, these rules will reduce NO<sub>x</sub> emissions by up to ninety percent. Some of these emission reductions occurred by the attainment years (2008-2010) and additional emission reductions will occur throughout the maintenance period.

*Nonroad Large spark-ignition engines and recreational engines standards.* The nonroad spark-ignition and recreational engine standards, effective in July 2003, regulate NO<sub>x</sub>, and hydrocarbons from groups of previously unregulated nonroad engines. These engine standards apply to large spark-ignition engines (e.g., forklifts and airport ground service equipment), recreational vehicles (e.g., off-highway motorcycles and all-terrain-vehicles), and recreational marine diesel engines sold in the United States and imported after the effective date of these standards.

When all of the nonroad spark-ignition and recreational engine standards are fully implemented, an overall seventy-two percent reduction in hydrocarbons and eighty percent reduction in NO<sub>x</sub>, emissions are expected by 2020. These controls will help reduce ambient concentrations of ozone.

Furthermore, because ozone concentrations in the St. Louis area are likely impacted by the transport of nitrogen oxides, or transport of ozone produced downwind from nitrogen oxides, the area's air quality is likely affected by regulation of NO<sub>x</sub> emissions from power plants in other states. EPA promulgated the NO<sub>x</sub> SIP Call, Clean Air Interstate Rule (CAIR) and CSAPR to address NO<sub>x</sub> emissions from large electric generating units (EGUs) and certain non-EGUs across the eastern United States.

*NO<sub>x</sub> SIP Call*. On October 27, 1998 (63 FR 57356), EPA issued the *NO<sub>x</sub> SIP Call* pursuant to the CAA to require 22 states and the District of Columbia to reduce *NO<sub>x</sub>* emissions. Affected states were required to comply with Phase I of the *SIP Call* beginning in 2004, and Phase II beginning in 2007. As part of the *NO<sub>x</sub> SIP Call*, the eastern third of Missouri was required to comply with Phase II of the program. In response, Missouri developed rules governing the control of *NO<sub>x</sub>* emissions from EGUs, major non-EGU industrial boilers, major cement kilns, and large internal combustion engines. EPA approved Missouri's Phase II *NO<sub>x</sub> SIP Call* rules on August 15, 2006 (71 FR 46860). Implementation of the Phase II rules was projected to result in an eighty-two percent *NO<sub>x</sub>* reduction from 1995 levels. Missouri rules which address the *NO<sub>x</sub> SIP call* include:

- 10 CSR 10-6.350, *Emissions limitations and Emissions Trading of Oxides of Nitrogen*
- 10 CSR 10-6.360, *Controlling NO<sub>x</sub> Emissions From Electric Generating Units and Non-Electric Generating Boilers*
- 10 CSR 10-6.380, *Control of NO<sub>x</sub> Emissions From Portland Cement Kilns*
- 10 CSR 10-6.390, *Control of NO<sub>x</sub> Emissions From Large Stationary Internal Combustion Engines*

*Clean Air Interstate Rule (CAIR)* and the *Cross State Air Pollution Rule (CSAPR)*. The Clean Air Interstate Rule (CAIR) was promulgated in 2005 and required twenty eight eastern states and the District of Columbia to significantly reduce emissions of *SO<sub>2</sub>* and *NO<sub>x</sub>* from electric generating units (EGUs) in order to limit

the interstate transport of these pollutants and the ozone and fine particulate matter these pollutants form in the atmosphere. 70 FR 25162 (May 12, 2005). In 2008, the D.C. Circuit initially vacated CAIR and ordered EPA to replace CAIR in its entirety, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur in order to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). On August 8, 2011, acting on the Court's remand, EPA promulgated CSAPR in order to replace CAIR and address interstate transport of emissions and the resulting secondary formation of ozone and fine particulate matter (76 FR 48208)<sup>6</sup>. CSAPR requires substantial reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from EGUs in twenty eight states in the eastern United States. Implementation of the rule was scheduled to begin on January 1, 2012, when CSAPR's cap-and-trade programs would have superseded the CAIR cap-and-trade programs. However, numerous parties filed petitions for review of CSAPR, and on December 30, 2011, the D.C. Circuit issued an order staying implementation of CSAPR

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<sup>6</sup> CAIR addressed the 1997 PM<sub>2.5</sub> annual standard and the 1997 8-hour ozone standard. CSAPR addresses contributions from upwind states to downwind nonattainment and maintenance of the 2006 24-hour PM<sub>2.5</sub> standard as well as the ozone and PM<sub>2.5</sub> NAAQS addressed by CAIR.

pending resolution of the petitions for review and directing EPA to continue to administer CAIR. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Dec. 30, 2011), ECF No. 1350421 at 2.

On August 21, 2012, the D.C. Circuit issued a decision addressing a subset of the issues raised by the petitioners which vacated and remanded CSAPR to the Agency and once again ordered continued implementation of CAIR. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit subsequently denied EPA's petition for rehearing en banc. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Jan. 24, 2013), ECF No. 1417012. EPA and other parties then petitioned the Supreme Court for a writ of certiorari, and the Supreme Court granted the petitions on June 24, 2013. *EPA v. EME Homer City Generation, L.P.*, 133 S. Ct. 2857 (2013).

On April 29, 2014, the Supreme Court reversed the D.C. Circuit's decision regarding CSAPR and remanded the case back to the D.C. Circuit for further proceedings consistent with its opinion. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584 (2014). In light of the Supreme Court decision, EPA filed a motion asking the D.C. Circuit to lift the stay and toll all



deadlines in CSAPR by three years, and on October 23, 2014, the D.C. Circuit granted EPA's motion. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Oct. 23, 2014), ECF No. 1518738 at 3.

As noted above, CAIR was promulgated in 2005 and incentivized early reductions from sources in all covered states, including those upwind of the St. Louis area. On December, 14, 2007, EPA approved Missouri's CAIR rules into the SIP and the state's CAIR rules became effective in 2009. (72 FR 71073) With regard to the EGUs located in the Missouri portion of the St. Louis nonattainment area, the requirements in CAIR were no more stringent than the requirements under the NO<sub>x</sub> SIP Call other than the fact that the annual NO<sub>x</sub> emissions had to be controlled in addition to ozone season NO<sub>x</sub> emissions. The Missouri rule written to comply with the NO<sub>x</sub> SIP Call requirements for EGUs was replaced with the CAIR NO<sub>x</sub> regulations, 10 CSR 10-6.362, *Clean Air Interstate Rule Annual NO<sub>x</sub> Trading program* and 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading program*, and include limits for non-EGU boilers, specifically Trigen Units 5 and 6 and Anheuser Busch Unit 6. However, these three units have all been retired, and received retired unit exemptions that prohibit these units from operating.

Missouri's redesignation request lists CAIR as a control measure. CAIR was thus in place and getting emission reductions in Missouri and in states upwind of Missouri when the St. Louis area began monitoring attainment of the 1997 8-hour ozone NAAQS, and the quality-assured, certified monitoring data used to demonstrate the area's attainment of the 1997 8-hour ozone NAAQS is therefore impacted by CAIR. Furthermore, because ozone concentrations in the St. Louis area are likely impacted by the transport of nitrogen oxides, or transport of ozone produced downwind from nitrogen oxides, the area's air quality is likely affected by regulation of NO<sub>x</sub> emissions from power plants in other states.

Table 2 presents statewide NO<sub>x</sub> EGU emissions data for the years 2002 and 2008 for the several states that were found to significantly contribute to ambient ozone concentrations in the St. Louis area. Emissions for 2008 reflect implementation of CAIR. Table 2 shows that states contributing to the St. Louis area reduced NO<sub>x</sub> emissions from EGUs by thirty nine percent between 2002 and 2008.

**Table 2 - Comparison of 2002, 2008, and 2013 Statewide EGU NO<sub>x</sub> Emissions Tons Per Year (TPY) for States Impacting the St. Louis Area<sup>7</sup>**

State	EGU CAMD Ozone Season NO <sub>x</sub>				
	2002 (tons)	2008 (tons)	Net Change 2002-2008 (tons)	2013 (tons)	Net Change 2008-2013 (tons)
AR	25,662	21,743	-3,920	22,614	871
IL	100,374	57,565	-42,808	29,158	-28,407
IN	158,379	94,253	-64,126	59,232	-35,021
KY	107,953	69,007	-38,946	47,014	-21,994
MI	78,343	57,124	-21,219	38,241	-18,883
MO	77,389	48,627	-28,762	42,629	-5,997
MS	30,583	27,445	-3,139	14,586	-12,859
OH	215,907	102,730	-113,176	49,160	-53,571
TN	95,012	38,902	-56,110	14,243	-24,659
Total	889,602	517,396	-372,206	316,877	-200,520

On November 21, 2014, the Administrator signed an action that published in the **Federal Register** on December 3, 2014, (79 FR 71163) amending the regulatory text of CSAPR to reflect the Court's October 23, 2014, order tolling all deadlines in CSAPR by three years, including provisions governing the sunset of CAIR. CAIR will therefore sunset at the end of 2014 and be replaced by CSAPR beginning January 1, 2015. Relative to CAIR, CSAPR requires similar or greater emission reductions from relevant upwind areas starting in 2015 and beyond. See Tables 6 through 8 for area emissions inventory projections that incorporate expected EGU emissions reductions from CSAPR within Missouri, and Table 9 for EGU emissions projections in states

<sup>7</sup> - EPA CAMD quarterly data: <ftp://ftp.epa.gov/dmdnload/emissions/daily/quarterly/>

upwind of the St. Louis area. The emission reductions associated with CAIR that helped the St. Louis area achieve attainment of the 1997 8-hour ozone NAAQS can therefore be considered permanent and enforceable for purposes of redesignation under section 107(d)(3)(E)(iii) of the CAA.

*State and Local Measures.* Missouri has several other state regulations that provide permanent and enforceable controls for NO<sub>x</sub> and VOC emissions in the St. Louis area. These SIP approved rules include:

- 10 CSR 10-5.070 "Open Burning Restrictions"
- 10 CSR 10-6.070 "New Source Performance Regulations"
- 10 CSR 10-6.075 "Maximum Achievable Control Technology Regulations"
- 10 CSR 10-6.080 "Emissions Standards for Hazardous Air Pollutants"
- 10 CSR 10-5.330 "Control of Emissions from Industrial Surface Coating Operations"
- 10 CSR 10-5.340 "Control of Emissions from Rotogravure and Flexographic Printing"
- 10 CSR 10-5.442 "Control of Emissions from Lithographic Printing Operations"
- 10 CSR 10-5.455 "Control of Emissions from Solvent Cleanup Operations"

*Reformulated Gasoline (RFG).* In July of 1998, Missouri requested that EPA extend the requirement for sale of RFG to St. Louis, Franklin, Jefferson, and St. Charles counties and the City of St. Louis in an effort to address the St. Louis ozone nonattainment area. On March 3, 1999 (64 FR 10366), EPA granted this request with compliance required by June 1, 1999.

*Vehicle Inspection and Maintenance Program.* To meet nonattainment area requirements for the one-hour ozone standard, Missouri implemented an inspection and maintenance program beginning in 2000 in the counties of St. Louis, St. Charles, and Jefferson and the City of St. Louis. Missouri codified the program through state rule 10 CSR 10-5.380, "Motor Vehicle Emissions Inspection," and EPA approved an additional revision to this rule on May 12, 2003 (68 FR 25414). The program was established to address ozone formation and reduce NO<sub>x</sub> and VOC emissions in the area. The mobile source emissions inventory projections used in this demonstration incorporate a new inspection and maintenance program rule, 10 CSR 10-5.381, which replaces the 10-5.380 rule. The State has implemented 10 CSR 10-5.381 since 2007. EPA has included in the docket for this action the TSD for the proposed approval of 10 CSR 10-5.381, which is being proposed for approval in a separate action<sup>8</sup>. The TSD explains in detail the projected emissions based on the state-approved I/M program. As demonstrated in the TSD, emissions have continued to trend downward since the implementation of this program by the State. The TSD further explains EPA's basis for proposing approve of 10 CSR 10-5.381 into the SIP. If EPA

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<sup>8</sup> EPA-R07-OAR-2014-0399

receives comments on that proposal and they impact this redesignation request, EPA will address those comments in relation to this action as well.

b. Emission Reductions

Missouri is using the 2002 comprehensive emissions inventory submitted to EPA's National Emissions Inventory (NEI) to meet the requirement of section 172(c)(3) of the CAA as the nonattainment base year inventory. MDNR's inventory contains NO<sub>x</sub> and VOC emissions for point, area, nonroad and onroad sources and was EPA approved May 31, 2007, (<http://www.gpo.gov/fdsys/pkg/FR-2007-05-31/html/E7-10231.htm>).

The St. Louis area attained the 1997 8-hour O<sub>3</sub> NAAQS based on monitoring data for the 3-year period from 2008-2010. MDNR has selected 2008 as the attainment emission inventory year. The attainment inventory identifies a level of NO<sub>x</sub> and VOC emissions in the area that is sufficient to attain the 1997 8-hour O<sub>3</sub> NAAQS. Missouri prepared a comprehensive 2008 emissions inventory to use as the attainment year inventory. Point source ozone season day emissions were calculated on the Emissions Inventory Questionnaire of actual emissions or EIQ form 2.0Z, Ozone Season Information. Area ozone season day emissions were calculated from Emissions Modeling Clearinghouse (EMCH) temporal

allocation profiles that are Source Classification Codes (SCC)-specific. Ozone season day emissions are typical of a Tuesday in July. Nonroad emissions were generated using EPA's NONROAD model and onroad attainment year inventories originated from EPA's mobile model, Mobile6.2. For more information on EPA's analysis of the 2002 and 2008 emissions inventory, see EPA's TSD dated October 28, 2014, or appendix A, B, and E of the state submittal, available on line at [www.regulations.gov](http://www.regulations.gov), Docket ID No. EPA-OAR-R07-2014-0900.

Using the inventories described above Missouri has documented changes in emissions from 2002 to 2008 for the St. Louis area as shown in tables below. Table 5 demonstrates that the entire St. Louis area has reduced emissions during the period except as described below.

**Table 3–2002 VOC and NO<sub>x</sub> Emissions for the Missouri Portion of the St. Louis Nonattainment Area Tons Per Day (TPD)**

Source Category	VOC	NO <sub>x</sub>
Point Sources	32.7	127.2
Area Sources	71.3	19.4
On-Road Mobile Sources	68.1	159.0
Non-Road Mobile Sources	47.0	60.7
Totals	219.1	366.3

**Table 4–2008 VOC and NO<sub>x</sub> Emissions for the Missouri Portion of the St. Louis Nonattainment Area (TPD)**

Source Category	VOC	NO <sub>x</sub>
Point Sources	18.0	88.8
Area Sources	99.5	6.5
On-Road Mobile Sources	57.9	96.2
Non-Road Mobile Sources	45.2	53.6
Totals	220.5	245.2

**Table 5—Comparison of 2002 and 2008 VOC and NO<sub>x</sub> Emissions for the Missouri Side of the St. Louis Nonattainment Area (TPD)**

Source Category	VOC	NO <sub>x</sub>
Point Sources	-14.7	-38.4
Area Sources	+28.2	-12.9
On-Road Mobile Sources	-10.2	-68.2
Non-Road Mobile Sources	-1.8	-7.1
Totals	+1.4	-121.1

\*Note: A negative value indicates a projected decrease in emissions from 2008 to 2025.

A positive value indicates a projected increase in emissions from 2008 to 2025.

As indicated in the table 5, NO<sub>x</sub> emissions decreased by 121 tpd which is a thirty three percent reduction. Total VOC emissions remained relatively stable with a slight increase of less than one percent or 1.4 tpd. MDNR determined that the VOC increase is due to a change in the reporting of small, non-Title-V-permitted sources from the point category in 2002 to the nonpoint category in 2008, as well as numerous changes in the area source estimation methodologies and emission factors. The substantial reduction in NO<sub>x</sub> emissions between 2002 and 2008, along with other regional controls have resulted in the improved monitored ground-level ozone concentrations in the St. Louis nonattainment area attributable to the 1997 ozone NAAQS compliance.



Based on the information summarized above, and information provided in EPA's technical support document, which is a part of this docket, Missouri has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

*Criteria (4) - The Area Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv)).*

In conjunction with its request to redesignate the St. Louis area to attainment for the 1997 8-hour O<sub>3</sub> NAAQS, MDNR submitted a SIP revision on November 1, 2011, supplemented on April 29, 2014, and further clarified on September 17, 2014, to provide for the maintenance of the 1997 8-hour O<sub>3</sub> NAAQS for at least ten years after the effective date of redesignation to attainment. EPA believes this maintenance plan meets the requirements for approval under section 175A of the CAA.

*a. Maintenance Plan Requirements*

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, MDNR must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the ten years following the

initial ten-year period, if applicable. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency measures, as EPA deems necessary, to assure prompt correction of any future 1997 8-hour O<sub>3</sub> NAAQS violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: (1) the attainment emissions inventory, (2) a maintenance demonstration, (3) a commitment to maintain the existing monitoring network, (4) verification of continued attainment, and (5) a contingency plan to plan or prevent or correct future violations. As discussed below, EPA is proposing that MDNR's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Missouri SIP.

*b. Maintenance Plan Base Year Inventory*

As discussed previously, the 2008 inventory used for the year of attainment is called the Attainment Year Inventory. It is also referred to as the Maintenance Plan Base Year Inventory and becomes the inventory future years will be compared to in order to show maintenance. However, MDNR created a different 2008 onroad inventory for the comparison to future years in the maintenance plan. As explained previously, for the 2008 onroad attainment inventory, MDNR used NEI data which was developed using Mobile 6.2 to compare with the 2002 nonattainment base

year. A second 2008 onroad inventory was developed utilizing MOVES to establish a maintenance base year for comparison to the future 2017 and 2025 MOVES based future year inventories. This allows for a smooth transition to the updated model and to prevent comparing a MOVES version of 2008 attainment year with the MOBILE6 version of the 2002 nonattainment base year inventory. Therefore, the 2008 onroad mobile source inventory used for supporting maintenance was developed using the most current version of EPA's highway mobile source emissions model MOVES2010a.

Emissions projections to support maintenance through 2025 have been prepared for the years 2017 and 2025, which is at the ten-year interval required in section 175(A) of the CAA.

EPA has reviewed the documentation provided by MDNR and found the emissions inventory to be acceptable. For more information on EPA's analysis of the 2008 emissions inventory, see EPA's TSD dated October 28, 2014, or appendix B and E of the state submittal, available on line at [www.regulations.gov](http://www.regulations.gov), Docket ID No. EPA-OAR-R07-2014-0900.

*c. Maintenance Demonstration*

Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the Area "for at least 10 years after the redesignation." EPA has interpreted this as a showing

of maintenance "for a period of ten years following redesignation." Calcagni Memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, the purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni Memorandum, pp. 9-10.

As discussed in detail in the subsection below, Missouri's maintenance plan submission demonstrates that the area's emissions inventories will remain below the attainment year inventories through 2025. For a demonstration of maintenance, emissions inventories are required to be projected to future dates to assess the influence of future growth and controls; however, the maintenance demonstration need not be based on air quality modeling. *See Wall v. EPA*, 265 F.3d 426 (6<sup>th</sup> Cir.2001); *Sierra Club v. EPA*, 375 F. 3d 537 [(7<sup>th</sup> Cir.2004)]. *See also* 66 FR 53099-53100; 68 FR 25430-25432. MDNR uses projection inventories to show that the area will remain in attainment. MDNR developed projection inventories for an interim year of 2017 and a maintenance plan end year of 2025 to show that future emissions of NO<sub>x</sub> and VOC will remain at or below the attainment year 2008 emissions levels in the St. Louis area through the year 2025. In light of more recent information on CSAPR, Missouri submitted on September 17, 2014, a revision that updated their future year projections for EGU facilities using

the presumption that CSAPR will be in place to control emissions from sources. Non-EGU Point source and nonpoint sources were developed using growth factors created from the EGAS model (<http://www.epa.gov/ttnecas1/egas5.htm>) using economic growth projections from the Policy Insight® Model for Regional Economic Model, Inc. (REMI) to project the future year inventory. EPA's Nonroad Model and EPA's onroad mobile model, MOVES, were utilized to project mobile source future inventories.

EPA has reviewed the documentation provided by MDNR and found the methodologies acceptable. Tables 6 and 7 below show the inventories for the 2008 attainment year, 2017 interim year, and the 2025 maintenance plan end year for the Missouri portion of the area.

**Table 6—Actual and Projected Annual NO<sub>x</sub> Emissions (TPD) for the Missouri Portion of the St. Louis Area**

Source Category	2008	2017	2025
Point Sources	88.84	87.01	89.81
Area Sources	6.52	6.68	6.85
On-Road Mobile Sources	160.38	62.32	41.66
Off-Road Mobile Sources	60.85	35.53	29.44
Totals	316.59	191.54	167.76

**Table 7—Actual and Projected Annual VOC Emissions (TPD) for the Missouri Portion of the St. Louis Area**

Source Category	2008	2017	2025
Point Sources	18.0	22.82	28.01
Area Sources	98.74	115.85	130.91
On-Road Mobile Sources	58.53	27.51	20.15
Off-Road Mobile Sources	46.44	28.88	28.17
Totals	221.71	195.06	207.24

**Table 8-Comparison of 2008 and 2025 NO<sub>x</sub> and VOC Emissions (TPD)  
for the Missouri Portion of the St. Louis Area**

Source Category	NO <sub>x</sub>	VOC
Point Sources	+0.97	+10.01
Area Sources	+0.33	+31.44
On-Road Mobile Sources	-119.59	-40.71
Off-Road Mobile Sources	-24.17	-16.99
Totals	-148.83	-14.47

\*Note: A negative value indicates a projected decrease in emissions from 2008 to 2025.

A positive value indicates a projected increase in emissions from 2008 to 2025.

Table 8 above shows between 2008 and 2025, the area is projected to reduce NO<sub>x</sub> emissions by 148.83 tpd, and VOC emissions by 14.47 tpd. Thus, the projected emissions inventories show that the area will continue to maintain the 1997 8-hour O<sub>3</sub> NAAQS during the 10 year maintenance period.

As discussed in detail above, the state's maintenance plan submission demonstrates that the area's emission inventories will remain below the attainment year inventories through at least 2025. In addition, for the reasons set forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the 1997 8-hour O<sub>3</sub> NAAQS at least through 2025.

Maintenance of the 1997 8-hour O<sub>3</sub> standard in the area is a function of regional as well as local emissions trends. The regional impacts are dominated by the impacts of NO<sub>x</sub> emissions. As discussed above, CAIR resulted in substantial NO<sub>x</sub> emission reductions for the area, and beginning in 2015, CSAPR will replace CAIR. CSAPR establishes emissions budgets for the total emissions that may be emitted annually from EGUs in each covered state<sup>9</sup>. Table 9 below shows that for states significantly contributing to ozone concentrations that actual EGU emissions in 2013 under CAIR, as well as Phase I budgets and Phase II assurance levels under CSAPR, are well below the level of actual EGU emissions in those same states during the attainment year of 2008. EPA therefore believes that with CSAPR in place, regional emissions will not affect maintenance of the 1997 8-hour ozone standard for the St. Louis area.

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<sup>9</sup> CSAPR's assurance provisions and associated penalties will take effect January 1, 2017. *See* EPA interim final rule published December 3, 2014 79 FR 71663. EPA does not expect states' emissions under CSAPR's Phase 1 budgets, which will apply in 2015 and 2016, to exceed what would have been their Phase 1 assurance levels under CSAPR's originally planned implementation schedule, because in the aggregate, state emissions are already meeting the Phase 1 budgets. *See* EPA Motion to Lift the Stay Entered on December 30, 2011, *EME Homer City Generation, L.P. v. EPA*, Case No. 11-1302 (filed June 26, 2014), ECF No. 1499505, Attachment at 9-15. *See also* 77 FR 10324, 10330-32 (February 21, 2012) (discussing EPA's rationale for revising effective date of assurance provisions).

**Table 9 - Comparison of 2008 and 2013 Statewide EGU Ozone Season NO<sub>x</sub> Emissions with CSAPR 2015 Phase I Budget and 2017 Phase II Assurance Levels (TPY) From States That Impact the St. Louis Area<sup>10</sup>**

State	Attainment year 2008	2013	CSAPR 2015 Phase I Budget	CSAPR 2017 Phase II Assurance Level
AR	21,743	22,614	15,110	18,283
IL	57,565	29,158	21,208	21,662
IN	94,253	59,232	46,876	55,872
KY	69,007	47,014	36,167	39,536
MI	57,124	38,241	28,041	32,536
MO	48,627	42,629	22,788	25,530
MS	27,445	14,586	12,429	15,039
OH	102,730	49,160	41,284	47,206
TN	38,902	14,243	14,908	9,699

EPA's proposed approval is based on a showing, in accordance with CAA section 175A, that Missouri's submittal demonstrates that the area can maintain through 2025.

*d. Monitoring Network*

There is an extensive monitoring network measuring O<sub>3</sub> in the St. Louis area. MDNR has committed to continue operation of the network in the area in compliance with 40 CFR part 58 and have thus addressed the requirement for monitoring. EPA approved Missouri's 2013 monitoring plan on November 22, 2013.

<http://www.epa.gov/region7/air/quality/quality.htm>

<sup>10</sup> - <http://www.epa.gov/airtransport/CSAPR/pdfs/OzoneSeasonNOx.xls>



*e. Verification of Continued Attainment*

MDNR has the legal authority to enforce and implement the requirements of the Missouri portion of the St. Louis area 1997 8-hour O<sub>3</sub> maintenance plan. This includes the authority to adopt, implement and enforce any subsequent emissions control contingency measures determined to be necessary to correct future O<sub>3</sub> attainment problems.

MDNR will track the progress of the maintenance plan by performing future reviews of triennial emission inventories for the St. Louis area as required in the Air Emissions Reporting Rule (AERR). For these periodic inventories, MDNR will review the assumptions made for the purpose of the maintenance demonstration concerning projected growth of activity levels.

*f. Contingency Measures in the Maintenance Plan.*

Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the state. A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures

with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d).

The contingency plan included in the submittal includes a triggering mechanism to determine when contingency measures are needed and a process of developing and implementing appropriate control measures. MDNR will use actual ambient monitoring data as the triggering event to determine when contingency measures should be implemented.

Missouri has identified two different levels of corrective responses should the 8-hour O<sub>3</sub> level exceed the NAAQS in any year. A level I trigger occurs when the fourth highest 8-hour ozone concentration exceeds 84 ppb in any year at any monitoring station in the nonattainment area as described in the state's submittal for the St. Louis area.

MDNR will evaluate a level I condition, if it occurs, as expeditiously as practicable to determine the causes of the ambient O<sub>3</sub> increase. If adverse emission trends are likely to continue, MDNR will first evaluate and subsequently adopt and implement control measures, taking into consideration the ease of implementation and the technical and economic feasibility of selected measures, as outlined in the state's plan no later than twenty four months after quality-assured ambient data has been entered into EPA's AQS database indicating a level I trigger.

A level II trigger is activated when any violation of the 8-hour O<sub>3</sub> NAAQS at any Federal reference method monitor in the St. Louis maintenance area is recorded, based on quality-assured monitoring data. In this event, MDNR will conduct a comprehensive study to determine the cause of the violation within six months of the triggering event. Selected measures will be implemented as expeditiously as practicable, taking into consideration the ease of implementation and the technical and economic feasibility of selected measures, as outlined in the state's plan no later than twenty four months after quality-assured ambient data has been entered into EPA's AQS database indicating a level II trigger.

The comprehensive measures will be selected from the following types of measures, as further detailed in the state's submission, or from any other measure deemed appropriate and effective at the time the selection is made by MDNR:

- Controls for local individual sources with significant effects on the monitored violation;
- Revisions to current rules that control NO<sub>x</sub> and VOC emissions such as lowering limits and applicability thresholds of current rules; and
- Establishing new rules that control NO<sub>x</sub> and VOC emissions.

In addition to the triggers indicated above, Missouri commits to compiling and monitoring O<sub>3</sub> inventories for the Missouri portion of the area every three years throughout the duration of the maintenance period to facilitate the emissions trends analysis included in the contingency plan under levels I and II.

EPA has concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: attainment emission inventory, maintenance demonstration, monitoring network, verification of continued attainment, and a contingency plan. Therefore, EPA proposes to find that the maintenance plan SIP revision submitted by MDNR for the Missouri portion of the St. Louis area meets the requirements of section 175A of the CAA and is approvable.

*g. Motor Vehicle Emissions Budgets for Transportation Conformity Purposes.*

Generally, maintenance plans establish motor vehicle emissions budgets for the last year of the maintenance plan, at a minimum (40 CFR 93.118(b)(2)(i)). However, Missouri did not include motor vehicle emissions budgets for the last year of this maintenance plan because EPA revoked the 1997 ozone NAAQS for transportation conformity purposes on May 21, 2012 and, therefore, the area is not required to demonstrate conformity for the 1997 ozone NAAQS. (77 FR 30167) EPA notes that Missouri

has submitted motor vehicle emissions budgets for the 2008 ozone NAAQS. Those budgets will become applicable when either EPA completes the adequacy process that was started on October 4, 2013, or approves these budgets, whichever occurs earlier.

In addition, the state submission has met the public notice requirements for SIP submissions in accordance with 40 CFR 51.102. The submission also satisfied the completeness criteria of 40 CFR part 51, appendix V. As explained above and in more detail in the technical support document which is part of this document, the revision meets the substantive SIP requirements of the CAA, including section 110 and implementing regulations.

#### **V. Summary of Proposed Actions**

EPA is proposing several actions regarding the area's redesignation and maintenance of the 1997 8-hour O<sub>3</sub> NAAQS. We are processing this as a proposed action because we are soliciting comments. First, EPA is proposing to determine, based on complete, quality-assured and certified monitoring data for the 2008-2010 monitoring period, and after review of all available data in AQS, that the St. Louis area is currently attaining the 1997 8-hour O<sub>3</sub> NAAQS. EPA is also proposing to determine that the St. Louis area has met the criteria under CAA section 107(d)(3)(E) for redesignation from nonattainment to attainment for the 1997 8-hour O<sub>3</sub> NAAQS, as discussed in more detail above in section IV. Therefore, EPA is proposing to approve Missouri's

request to redesignate the St. Louis Area and change the legal designation of Franklin, Jefferson, St. Charles, and St. Louis Counties along with the City of St. Louis from nonattainment to attainment for the 1997 8-hour ozone NAAQS.

Second, EPA is proposing to approve the maintenance plan for the St. Louis area. The maintenance plan demonstrates that the area will continue to maintain the 1997 8-hour O<sub>3</sub> NAAQS.

If finalized, approval of the redesignation request would change the official designation of the Missouri portion of the St. Louis area for the 1997 8-hour O<sub>3</sub> NAAQS, found at 40 CFR part 81, from nonattainment to attainment.

#### **VI. Statutory and Executive Order Reviews**

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011). This action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rulemaking will not have a significant economic impact on a substantial number of small entities under the Regulatory

Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rulemaking would approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4).

This rulemaking also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). Thus Executive Order 13132 does not apply to this action. This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the CAA. This rulemaking also is not subject to Executive Order 13045, "Protection of Children from Environmental Health Risks

and Safety Risks" (62 FR 19885, April 23, 1997) because it approves a state rule implementing a Federal standard.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a state submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA when it reviews a state submission, to use VCS in place of a state submission that otherwise satisfies the provisions of the CAA. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Burden is defined at 5 CFR 1320.3(b).

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this proposed rule and other required information to the U.S. Senate, the U.S. House of



Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. Filing a petition for reconsideration by the Administrator of this proposed rule does not affect the finality of this rulemaking for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such future rule or action.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen Oxides, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

**List of Subjects in 40 CFR Part 81**

Environmental protection, Air pollution control.

Authority: 42 U.S.C. 7401 et seq.

Dated: December 19, 2014.

Karl Brooks,

Regional Administrator,

Region 7.

For the reasons stated in the preamble, the Environmental Protection Agency proposes to amend 40 CFR parts 52 and 81 as set forth below:

**Part 52 - APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

**Subpart AA - MISSOURI**

2. Section 52.1342 is amended by adding paragraph (c) to read as follows:

**§ 52.1342 Control strategy: Ozone.**

\* \* \* \* \*

(c) On November 3, 2011, and April 29, 2014, Missouri submitted requests to redesignate the Missouri portion of the St. Louis MO-IL area to attainment of the 1997 8-hour ozone standard. The Missouri portion of the St. Louis MO-IL area includes Jefferson, Franklin, St. Charles, and St. Louis Counties along with the City of St. Louis. As part of the redesignation request, the State submitted a plan for maintaining the 1997 8-hour ozone standard through 2025 in the area as required by Section 175A of the Clean Air Act.

**Part 81 - DESIGNATION OF AREAS FOR AIR QUALITY PLANNING PURPOSES**

3. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

**Subpart C-Section 107 Attainment Status Designations**

4. Section 81.326 is amended by revising the entry for St. Louis MO-IL in the table entitled "Missouri-1997 8-Hour Ozone NAAQS (Primary and Secondary)" to read as follows:

**§81.326 Missouri**

\* \* \* \* \*

MISSOURI-1997 8-HOUR OZONE NAAQS (PRIMARY AND SECONDARY)

Designated area	Designation <sup>a</sup>		Category/classification	
	Date <sup>1</sup>	Type	Date <sup>1</sup>	Type
* * * * *				
St. Louis, MO-IL:				
Franklin County		Attainment		
Jefferson County		Attainment		
St. Charles County		Attainment		
St. Louis City		Attainment		
St. Louis County.		Attainment		
* * * * *				

<sup>a</sup>Includes Indian Country located in each county or area, except as otherwise specified.

<sup>1</sup>This date is June 15, 2004, unless otherwise noted.

\* \* \* \* \*

Date: 12/31/2014]